Installation Guide for Cisco Unified Videoconferencing Manager

Release 5.5
March 2008

Customer Order Number:
Text Part Number: OL-14925-01

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Installing Cisco Unified Videoconferencing Manager

Pre-installation

Read this section before installing Cisco Unified Videoconferencing Manager.

Minimum System Requirements

Cisco Unified Videoconferencing Manager must be installed on one of the following Cisco MCS server models:

- Cisco MCS 7825 Series
  - MCS-7825-H2
  - MCS-7825-I2
  - MCS-7825-H3
  - MCS-7825-I3
- Cisco MCS 7835 Series
  - MCS-7835-H2
  - MCS-7835-I2

- Cisco MCS 7845 Series
    - MCS-7845-H2
    - MCS-7845-I2

Server Operating System

Cisco Unified Videoconferencing Manager version 5.5 requires the servers to run the Cisco Media Convergence Server operating system, which is a Cisco Systems version of the Windows 2003 version 1.2a. This version of the operating system is shipped automatically to customers purchasing this product for the first time. Customers who are upgrading from previous versions of this product which are installed on a Windows 2000 operating system will need to upgrade the server operating system before installing the Cisco Unified Videoconferencing Manager version 5.5. You can download the Media Convergence Server operating system software from the Cisco.com Software Download tool at the following location: http://www.cisco.com/cgi-bin/tablebuild.pl/cmva-3des.

LDAP Server Types

Cisco Unified Videoconferencing Manager supports Microsoft Active Directory 2000 and 2003.

Supported Devices

Cisco Unified Videoconferencing Manager supports the following devices:

- Cisco IOS H.323 Gatekeeper
- Cisco Unified Communications Manager
- Broadsoft IPCentrix
- Cisco Unified Videoconferencing 3500 MCU versions 4.4 and 5.5
- Cisco Gateway versions 5.5
- Cisco Unified Videoconferencing Desktop component version 5.5
- Management for the following SONY endpoints: PCS 1, PCS 11, PCS 1600, TL30, TL50, G50, and G70

SNMP Service

Install the Microsoft Windows SNMP service for Cisco Unified Videoconferencing Manager.

Port Requirements

Table 1-1 shows the required ports for Cisco Unified Videoconferencing Manager. Make sure all required ports are available.

Table 1-1   Required Ports

Protocol	Ports	Type	Direction	Purpose	Destination
Cisco Unified Videoconferencing Manager Server Ports					
HTTP	80	TCP	In from Web	Web UI access and Web Service access	Cisco Unified Videoconferencing Manager
XML	3336	TCP	In from Desktop	Cisco Unified Videoconferencing Manager's version of MCU Call Control XML API	Cisco Unified Videoconferencing Manager
Internal gatekeeper HTTP	8011	TCP	In from Web	Web UI access. Disabled by default.	Cisco Unified Videoconferencing Manager
Database connection	3306	TCP	Local database connection	If the internal database is installed, the application communicates with the database using port 3306.	Cisco Unified Videoconferencing Manager
SNMP	161	UDP	In from Resource Manager and Network Manager	Configuration/ Status	Cisco Unified Videoconferencing Manager
FTP	21	TCP	In from Network Manager	Log retrieval	Cisco Unified Videoconferencing Manager
XML	3271	TCP	Local connection	Resource Manager connects to the XML API interface of the internal gatekeeper	Cisco Unified Videoconferencing Manager
MCU Ports					
HTTP	80	TCP	In from Web	Web UI access	MCU
XML	3336	TCP	In from Resource Manager	MCU Call Control XML API	MCU
XML	3337	TCP	In from another MCU or Desktop	MCU Cascade XML API	MCU
SNMP	161	UDP	In from Resource Manager and Network Manager	Configuration/Status	MCU
Telnet	23	TCP	In from Network Manager	Log retrieval and advanced commands	MCU
Gateway Ports					
HTTP	80	TCP	In from Web	Web UI access	gateway
SNMP	161	UDP	In from Resource Manager and Network Manager	Configuration/Status	gateway
Telnet	23	TCP	In from Network Manager	Log retrieval and advanced commands	gateway

How to Install Cisco Unified Videoconferencing Manager

During Cisco Unified Videoconferencing Manager installation Resource Manager and Network Manager components are installed. The Desktop component of Cisco Unified Videoconferencing Manager is installed separately.

Installing Cisco Unified Videoconferencing Manager

Procedure

Step 1   Click the Cisco_Unified_Videoconferencing_Manager installer to start the installation wizard.

Step 2   Click **Next** in the Introduction window.

Step 3   Read and accept the license agreement in the License Agreement window, and then click **Next**.

Step 4   In the Installation Type window, leave the default option and click **Next**.

In the User Provisioning window, choose a user provisioning option. There are three available options:

- No integration with Directory Server
- Directory Server
- Directory Server with Single Sign On (SSO) enabled.

Step 5   Click **Next**.

Step 6   Enter the host name URL and Web server port number used by the application in the Server Information window.

Make sure that the Web server port is not in use by another application, and then click **Next**.

Step 7   Enter mail server information in the Outgoing Mail Server Information window. To confirm that the e-mail server is functioning, enter an e-mail address. If the e-mail server is functioning correctly, you receive a test e-mail.

> **Note**   If SMTP server fields are left blank, e-mail messages are not sent.

Step 8   Create an administrator account for accessing the application in the Account Login Information window. With this account, you can access Cisco Unified Videoconferencing Manager.

Step 9   Review the installation summary in the Pre-installation Summary window, and then click **Install** to proceed with the installation.

> **Note**   Do not interrupt the installation. After starting the Cisco Unified Videoconferencing Manager service allow several minutes for server initialization before logging in to the web-user interface.

Installing Cisco Unified Videoconferencing Desktop

During the installation you perform a basic Desktop configuration by defining servers which Desktop uses. Follow recommendations in this section to configure Desktop correctly:

- In a single Cisco Unified Videoconferencing 3545 MCU deployment, use the same gatekeeper as Cisco Unified Videoconferencing 3545 MCU is configured to use. If you install Cisco Unified Videoconferencing Manager as a part of your deployment, specify the Cisco Unified Videoconferencing Manager internal gatekeeper.

- In a multiple Cisco Unified Videoconferencing 3545 MCU deployment, you must use Cisco Unified Videoconferencing Manager as your meeting control server. In a single Cisco Unified Videoconferencing 3545 MCU deployment, you can use either Cisco Unified Videoconferencing 3545 MCU or Cisco Unified Videoconferencing Manager.

- The default Desktop web server port is 80, but if it is used by another application, the installer detects it and prompts you to specify a different port.
  If you wish to use HTTPs protocol for security, you must configure the Desktop web server port to 443 after the installation is complete.

The Desktop serial key is required for the installation and operation of the Desktop and is not included in this package. For more information about obtaining the serial key, refer to the License Fulfillment Instructions for Cisco Unified Videoconferencing Manager.

Procedure

Step 1   Insert the product CD-ROM.

Step 2   In the CD menu, choose **Install Cisco Unified Videoconferencing Desktop Server**

-or-

In the Windows folder on the product CD-ROM, double-click setup.exe file to launch the installer.

Step 3   In the Choose Setup Language window, choose the installation language and click **OK**.

Step 4   In the Welcome window, click **Next**.

Step 5   In the License Agreement window, read the agreement, choose **I accept the terms in the license agreement**, and then click **Next**.

Step 6   In the Customer Information window, enter information for software registration, choose the user access option for Desktop, and then click **Next**.

Step 7   In the Cisco Unified Videoconferencing Desktop Desktop Serial Key window, enter the Desktop key number, and click **Next**.

Step 8   In the Custom Setup window, define which Desktop components to install on this server, specify the installation location, and then click **Next**.

> **Note**
>
> The default directory for Cisco Unified Videoconferencing Streaming Server installation in version 5.5. is C:\Program Files\Darwin Streaming Server.
> For a single server installation, install both components.

Step 9   In the Cisco Unified Videoconferencing Desktop Network Configuration window, configure the Desktop Network Interface and Desktop web server port, and click **Next**.

Step 10   In the Configure Servers window, configure server settings:

    a. Enter the IP address of your gatekeeper in the Gatekeeper IP address field.

    b. Enter the server's NIC IP address in the IP address field under Use Cisco Unified Videoconferencing Manager for moderation.

    Alternatively, choose **Do not enable moderation** to work without a meeting control server in a multiple Cisco Unified Videoconferencing 3545 MCU deployment. If you use Cisco Unified Videoconferencing Manager as your meeting control server, enter the Cisco Unified Videoconferencing Manager IP address in the IP address of Cisco IOS H.323 Gatekeeper field so that Desktop uses the Cisco Unified Videoconferencing Manager internal gatekeeper.

> **Note**   You must use the specific IP addresses, not loopback addresses.

Step 11   In the Configure Streaming window, choose a server to manage streaming:

    a. When your deployment includes multiple Desktop servers, you must define which one of your Desktop servers is enabled for streaming.

    Choose **This Cisco Unified Videoconferencing Desktop will be used to manage streaming services** to define the Desktop server that you are currently configuring as the Desktop server that is enabled for streaming.

> **Note**   We recommend that you choose only one Desktop server to be a streaming server.

    If you install the Cisco Unified Videoconferencing Streaming Server on a separate server, type the IP address of that server in the Darwin Streaming Server IP address field.

    b. When your deployment includes multiple Desktop servers, and you do *not* want to define the Desktop server that you are currently configuring as the Desktop server that is enabled for streaming, choose **Use an alternative Cisco Unified Videoconferencing Desktop to manage streaming services**.

    Type the Fully Qualified Domain Name (FQDN) of the Desktop server that *is* enabled for streaming in the Server URL field.

    c. Choose **Disable streaming for this Cisco Unified Videoconferencing Desktop** to disable streaming for the Desktop server that you are currently configuring.

Step 12   In the Cisco Unified Videoconferencing Desktop Hostname Configuration window, specify the hostname of the server that clients should use to connect to the Desktop.

> **Note**   Make sure that you specify the hostname that clients can resolve.

Step 13   In the Ready to Install the Program window, click **Install**.

Step 14   Click **Finish**.

Step 15   After installation is completed, verify that the Desktop server is operational:

    a. Access the Desktop Server Administration interface by connecting to the following URL:

    http://<SERVERFQDN:PORT>/cuvm/admin

    b. Log in using the default user name (admin) and password (admin).

    c. Open the Status tab of the Desktop Server Administration interface, and verify that all four types of servers are connected.

> ✎
>
> **Note**   The light next to each link indicates whether or not the connection to the target server or registration with the Gatekeeper is successful. When the light is red, a tooltip containing error details is available. Click the red light to view further error information.

Step 16   Remove the product CD-ROM.

How to Perform Post-installation Procedures

Confirming Installation

To confirm that installation is successful, wait 2-3 minutes for server initialization and then go to http://host-URL:port-number. After successful system initialization, the Resource Manager login window appears.

Running the Cisco Unified Videoconferencing Manager Service

Cisco Unified Videoconferencing Manager is installed as a Windows Service on your server. Cisco Unified Videoconferencing Manager automatically starts when the server is started.

Go to **Start > Settings > Control Panel > Administrative Tools > Services** and find the list of Cisco Unified Videoconferencing Manager related services. The following services are installed:

- Cisco Unified Videoconferencing Manager—The service that Resource Manager and Network Manager run on. This is started automatically.
- Cisco SipServer—The service for the SIP User agent included with Resource Manager for SIP call control. This is started automatically.
- Cisco Unified MeetingPlace H.323 Gatekeeper - The service that the internal gatekeeper runs on. This is started automatically.

Logging in for the First Time

Procedure

Step 1   Access either Resource Manager or Network Manager login windows from the Start menu of the local server.

Step 2   Log in to Resource Manager for the first time.

The User Provisioning window opens.

Step 3   (Optional) Enable directory integration to synchronize user records from a Directory Server.

For further information, see the Configuration Guide for Cisco Unified Videoconferencing Manager.

Obtaining a License

At the end of the installation process, a temporary license is automatically installed. This license is valid for 30 days. To obtain an Cisco Unified Videoconferencing Manager license, perform a procedure described in the License Fulfillment Instructions for Cisco Unified Videoconferencing Manager.

Changing Server Name and Web Port

This section describes how to change the Web port after installation.

Procedure

Step 1   After installation, go to

\JBOSS_DIR\server\default\deploy\jbossweb-tomcat55.sar\server.xml

and modify the following entry in bold:

```
<Connector port="80" address="${jboss.bind.address}"
    maxThreads="250" strategy="ms"
              maxHttpHeaderSize="8192"
    emptySessionPath="true"
    enableLookups="false" redirectPort="8443"
                   acceptCount="100"
    connectionTimeout="20000"
              disableUploadTimeout="true"/>
```

Step 2   Go to the \JBOSS_DIR\bin\vcs-config.xml file and modify the following entry:

```
<host-url>http://server_URL:port_number</host-url>
```
\JBOSS_DIR is the default JBOSS home directory path.

The default path is C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss.

Uninstalling Cisco Unified Videoconferencing Manager

If you uninstall Cisco Unified Videoconferencing Manager, the database that Cisco Unified Videoconferencing Manager uses is removed from either the database server.

Procedure

Step 1   Choose **Start > Programs >** Cisco **>** Cisco Unified Videoconferencing Manager **> Uninstall** Cisco Unified Videoconferencing Manager

–or–

Step 2   Choose **Control Panel > Add/Remove Programs >**Cisco Unified Videoconferencing Manager **> Uninstall Program**.

Backup and Restore Procedures

This section is intended to assist system administrators to back up and restore the Cisco Unified Videoconferencing Manager database and configuration files.

Overview

There are many reasons for performing system backups on a regular basis. While it is usually assumed that backups are necessary only in cases of disk crashes or other physical disasters, most such cases are application-related. For example:

- User mistakes
- Application bugs
- Power failure
- Disk corruption
- Any other kind of physical disaster

To restore Cisco Unified Videoconferencing Manager data, stop the Cisco Unified Videoconferencing Manager service before restoring the database, configuration files, branding and sound files. Restart the Cisco Unified Videoconferencing Manager service after restoration is complete.

How to Perform Backup Procedure

Backing Up the Database

The database backup procedure supports MySQL database version 4.0.21. This section describes how to back up MySQL database version 4.0.21.

Procedure

Step 1   Open a DOS window and modify the current directory so that the default path points to the MySQL bin directory.

The default MySQL installation path is:

C:\Program Files\MySQl\mysql-4.0.21-win\bin

Step 2   Run the following DOS command to dump the contents of the MySQL database to a file called mydump:

mysqldump -u root --all-databases --add-drop-table --single-transaction > mydump

where

- -u root indicates that the user account "root" is used to run this command. "Root" is the default administrator created during MySQL installation.
- --all-databases means that all databases are to be backed up.
- --add-drop-table ensures that drop table SQL statements are generated for every dumped table.
- --single-transaction ensures that you do not need to stop the MySQL service when you back up the database.
- By default, you do not need to provide a password for local "root" login. However, if you change the root user password, you should add the text "-p password" to the command line. For example:

mysqldump -u root -p rootpassword --all- databases --add-drop-table --single-transaction >mydump

Step 3   Save the mydump file to a safe location.

Backing Up Configuration Files

This section describes how to back up the following files by copying them to a different physical location:

- Network Manager Configuration Files, page 2-3
- Backing Up Branding and Sound Files, page 2-3

Database Connectivity Property File

Place the mysql-ds.xml file under C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss\server\default\deploy.

Note This is the default JBOSS_HOME directory for Cisco Unified Videoconferencing Manager version 5.1. For older versions, the JBOSS_HOME directory may be different.

Configuration Files

Backup the following configuration files from C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss\bin:

vcs-cdr-config.xml

vsc-config.xml

vcs-core.properties

vnex.properties

LDAP Configuration Files

Place the following files under the C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss\bin\configFiles directory:

- All files (if any) under this directory.

Network Manager Configuration Files

Place the following under the C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss\server\default\deploy\vcs.ear\cuvcmnm.war\WEB-INF\classes\ directory:

- adminconfig folder
- config folder

Backing Up Branding and Sound Files

Back up all files (if any) located under the C:\Program Files\Cisco\Unified Videoconferencing Manager\CUVCMRM\jboss\server\default\deploy\branding.war\image directory to a different physical location.

Backing Up the License

Go to My Computer > HKEY_LOCAL_MACHINE > SOFTWARE > Cisco > Resource Manager > 4.0 component of CUVC-M\4.0" directory, and save the value under "license".

Backing Up the Internal Gatekeeper Configuration File

Go to the Web interface of the internal gatekeeper on port 8011 and click **Export** to save the configuration files of the internal gatekeeper.

How to Perform Restore Procedure

This section describes how to restore Cisco Unified Videoconferencing Manager data. This section includes the following topics:

Procedure Overview

The restoring procedure includes the following stages:

- Stop the Cisco Unified Videoconferencing Manager service
  - Go to **Control Panel > Administrative Tools > Services**.
  - Find the service named "Cisco Unified Videoconferencing Manager" and stop it.
- Restore the database—see the Restoring the Database, page 2-4.
- Restore the configuration files—see the Restoring Configuration Files, page 2-5.
- Restore the Branding and Sound Files—see the Restoring Branding and Sound Files, page 2-5.
- Restore the License Files—see the Restoring the License, page 2-5.
- Start the Cisco Unified Videoconferencing Manager service.

Restoring the Database

The database backup procedure supports MySQL database version 4.0.21. This section describes how to restore MySQL database version 4.0.21.

Procedure

Step 1   Open a DOS window and modify the current directory so that the default path points to the MySQL bin directory.

The default MySQL installation path is:

C:\Program Files\MySQl\mysql-4.0.21-win\bin.

Step 2   Copy the mydump file to this directory where mydump is the name of the database backup file.

Step 3   In the DOS window, enter the "mysql -u root" command to access the MySQL database command line user interface.

The command link prompt changes to mysql>.

Step 4   Run the following command to restore the content that has been dumped into the backup file to the database:

mysql> source mydump

Step 5   Run the following command to exit the MySQL command line window:

mysql > exit

Restoring Configuration Files

Restore the configuration files listed in the Backing Up Configuration Files, page 2-2.

Restoring Branding and Sound Files

Refer to the Backing Up Branding and Sound Files, page 2-3.

Restoring the License

Go to **Start > Programs > Cisco > Cisco Unified Videoconferencing Manager > Update License**, and enter the backup license.

Restoring the Internal Gatekeeper Configuration File

Go to the Web interface of the internal gatekeeper on port 8011 and click **Import** to import the configuration backup of the internal gatekeeper.